10/564476

Attorney's Docket No. 1034232-000006

## IAP20 Ro

19 JAN 2006

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re F	atent Application of	
Yoshil	niro HAYAKAWA	Group Art Unit:
Applic	ation No.:	Examiner:
Filed:	January 13, 2006	Confirmation No.:
For:	METHOD FOR SYNTHESIZING CYCLIC BIS (DINUCLEOTIDE)	

## FIRST INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In accordance with the duty of disclosure as set forth in 37 C.F.R. § 1.56, the accompanying information is being submitted in accordance with 37 C.F.R. §§ 1.97 and 1.98. Pursuant to 37 C.F.R. § 1.98, a copy of each of the documents cited is enclosed.

To assist the Examiner, the documents are listed on the attached form PTO-1449. It is respectfully requested that an Examiner initialed copy of this form be returned to the undersigned.

Respectfully submitted,

**BUCHANAN INGERSOLL PC** 

Date January 13, 2006

Robert G. Muka

Registration No. 28,531

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Substitute for form 1449A/PTO & 1449B/PTO	Complete if Known				
FIRST	Application Number	444428172			
INFORMATION DISCLOSURE	Filing Date	<b>80/564476</b>			
STATEMENT BY APPLICANT	First Named Inventor Possibility Yoshihiro Hayakawa				
(use as many sheets as necessary)	Examiner Name	13 JAN 2006			

**Attorney Docket Number** 

1034232-000006

U.S. PATENT DOCUMENTS					
Examiner Initials	Document Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	Issue/Publication Date (MM-DD-YYYY)	

FOREIGN PATENT DOCUMENTS											
				ST	STATUS						
Examiner Initials	Document Number	Kind Code (if known)	Country	Date of Publication (MM-DD-YYYY)	Translation	Partial Translation	Eng. Lang. Summary	Search Report	IPER	Abstract	Cited in Spec
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NON-PATENT LITERATURE DOCUMENTS						
Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
	ROSS et al., "Regulation of cellulose synthesis in <i>Acetobacter xylinum</i> by cyclic diguanylic acid," <i>Nature</i> , January 15, 1987, p 279, Vol. 325*					
	ROSS et al., "The Cyclic Diguanylic Acid Regulatory System of Cellulose Synthesis in <i>Acetobacter xylinum</i> ," <i>The Journal of Biological Chemistry</i> , Nov. 5, 1990, pp 18933-18943, Vol. 265, No. 31, The American Society for Biochemistry and Molecular Biology, Inc.*					
	HSU et al., "Synthesis and Physical Characterization of <u>BIS</u> 3'→5' Cyclic <u>Di</u> nucleotides ( <u>-NpNp-</u> ): RNA Polymerase Inhibitors," <i>Nucleosides &amp; Nucleotides</i> , 1985, p 377, 4(3), Marcel Dekker, Inc.*					
	HAYAKAWA et al., "A facile synthesis of cyclic bis(3'→5')diguanylic acid," <i>Tetrahedron</i> , Aug. 25, 2003, pp 6465-6471, Vol. 59, No. 34, Elsevier Ltd.*					
	FALK et al., "Nucleoside and Nucleotide., 3. Polycondensation of thymidine 3'-phosphate by the trimester method," <i>Helvetica Chimica Acta</i> , 1972, pp 1928-1947, Vol. 55, No. 6*					
	DE NAPOLI et al., "Synthesis of cyclic branched oligodeoxyribonucleotides," Fazzetta Chimica Italiana, 1991, pp 419-421, Vol. 121, No. 8, Societa Chemica Italiana*					

\*Copy attached.

Sheet

Examiner		Date	
Signature		Considered	
*57444	1 111 1 15 6	Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with M.P.E.P. § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.